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GP20A thru GP20M

2.0A Leaded Sintered Glass Passivated Junction Standard Rectifiers - 50V-1000V



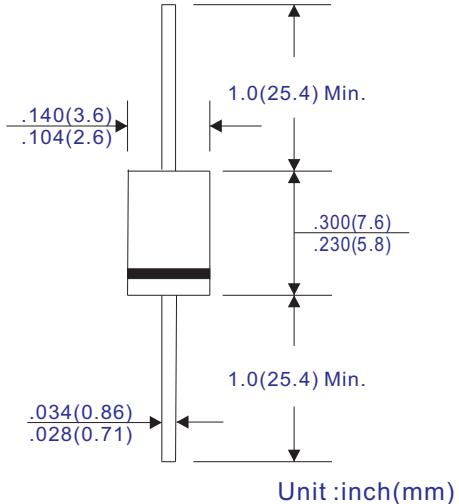
FEATURES

- High temperature metallurgically bonded construction
- Sintered glass cavity free junction
- 2.0A operation at TA=55°C with no thermal runaway
- High temperature soldering guaranteed, 350°C/10 sec, 0.375" (9.5mm) lead length, 5lbs (2.3kg) tension
- Typical IR less than 0.1µA
- Lead-free parts for green partner, meet environmental standards of MIL-S-19500

MECHANICAL DATA

- Case: JEDEC DO-15 molded plastic
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solderable per MIL-STD-750 Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.015 ounces, 0.4 grams

DO-15



MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

GP-	Symbols	20A	20B	20D	20G	20J	20K	20M	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current TA=55°C, See Figure 1	I _(AV)	2.0						Amps	
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	65.0						Amps	
Maximum Instantaneous Forward Voltage at 2.0A	V _F	1.1						Volts	
Maximum full load reverse current, full cycle (Note 1)	I _{R(AV)}	100.0						µA	
Maximum DC Reverse Current TA= 25°C at Rated DC Blocking Voltage	I _R	5.0 200.0						µA	
Typical Junction Capacitance (Note 2)	C _J	40.0						pF	
Typical Reverse Recovery Time (Note 3)	T _{RR}	2.5						µs	
Typical Thermal Resistance (Note 4)	R _{θJA} R _{θJL}	25.0 10.0						°C/W	
Operating Junction & Storage Temperature Range	T _J , T _{TSG}	-65 ~ +175						°C	

Note 1. Average current, 0.375" (9.5mm) lead length at TA=55°C

2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts

3. Reverse recovery test condition: I_r=0.5A, I_{rr}=1.0A, I_{RR}=0.25A

4. Thermal resistance from junction to ambient & junction to lead at 0.375" (9.5mm) lead length P.C.B. mounted



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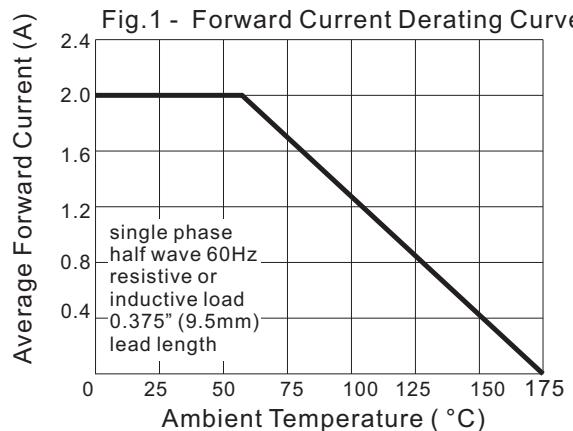


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current (A)

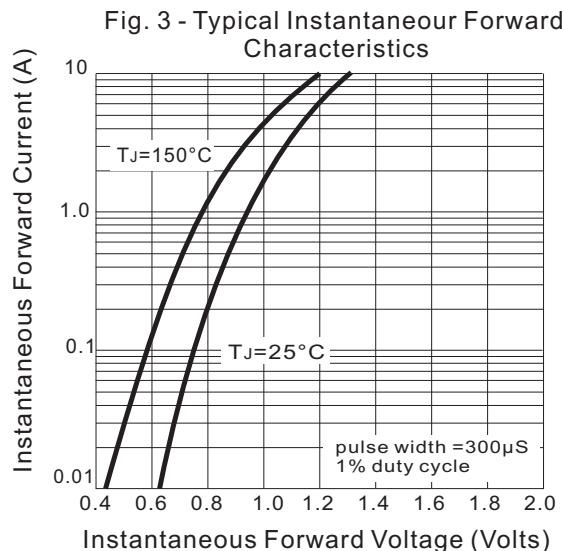
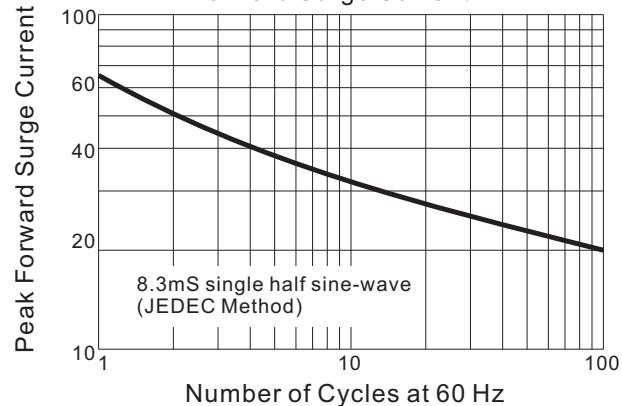


Fig. 4 - Typical Reverse Characteristics

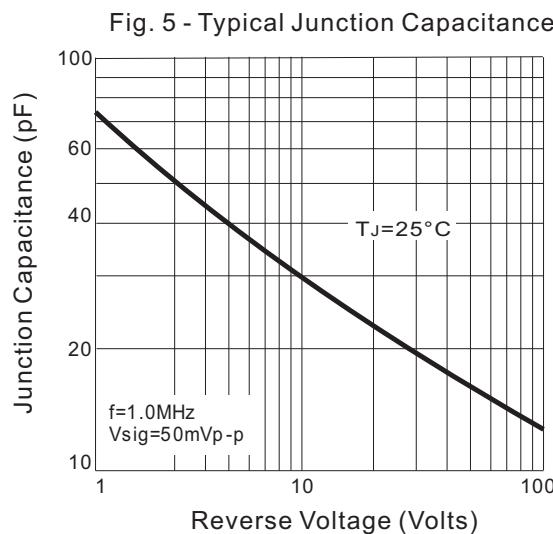
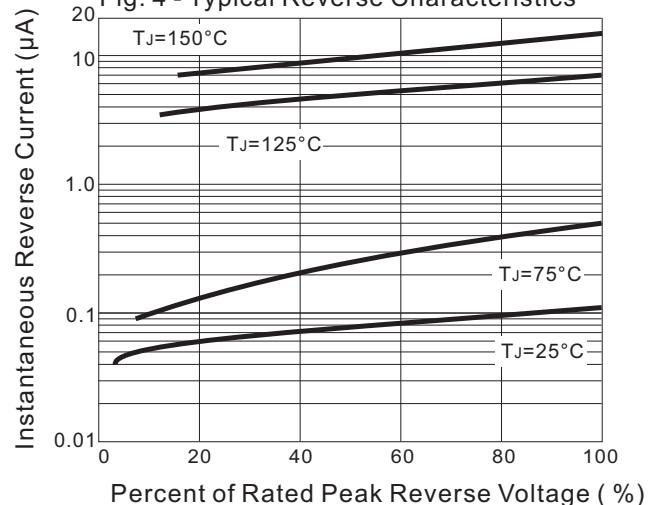


Fig. 6 - Typical Transient Thermal Impedance

